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From:

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Date: July 29, 2005

Re: phone communication on July 29, 2005; Patent application/Control Number: 10/764,252, Art Unit: 2881

Dear David,

I very appreciated to your comments and instructions on our phone communication to discuss the allowance possibility for rejected claim 29, 30, 33, 34, 37, 38, 41, 42, 49 and 52 in your Office Action Summary dated on July 11, 2005. Now, I reformat claim 29 (claims 30, 33, 34, 37, 38 are similar) in the following as an example according to your kind instruction:

[For reference: 3. (Previously presented) An ion trap, comprising: a three-dimensional rotationally symmetric ring electrode and two cap electrodes with surfaces facing toward the inside of the ion trap, each said two cap electrodes being further composed of a first cone electrode and a second disk electrode; a RF or periodic circuitry constructed and arranged for applying a RF or periodic voltage to said ring electrode to generate a main quadrupole field in said ion trap; an AC circuitry constructed and arranged for applying an AC voltage to said disk electrodes of said two cap electrodes to generate a dipole field in said ion trap; a DC circuitry constructed and arranged for applying an DC voltage to said cone electrodes of said two cap electrodes to generate an electrically variable electrostatic octopole field in said ion trap.]

29. (Currently amended) A method for operating an ion trap of in claim 3, wherein comprising: keeping the amplitude and frequency of the RF voltage or amplitude and period of the periodic voltage being maintained at predetermined values; simultaneously sweeping or

scanning the amplitude of the DC voltage and the amplitude and frequency of the AC voltage vs. time being simultaneously swept or scanned to eject ion mass from the ion trap one after another.

In addition, for rejection of claim 1, I forgot to discuss it on the phone. I reformat it in the following:

1. (Currently amended) An ion trap, comprising: a three-dimensional rotationally symmetric ring electrode and two cap electrodes with surfaces facing toward the inside of the ion trap, each said two cap electrodes being further composed of a first cone electrode and a second disk electrode; a first means for generating a time-varying, substantially quadrupole field, a second means for generating an independent dipole field; a third means for generating an independent, electrically variable electrostatic DC multipole field.

I changed "electrostatic" to "DC" multipole field. Could you please let me know your comments?

Could you please review them and give me further comments or your formats with which the rejections could be overcome? Could you please send me an email or fax or letter to let me know your opinions? After then, I will write the response letter to the Office Action Summary in time. Thank you very much for your helpful instructions.

Sincerely yours,



(Yang Wang)